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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|---|---|---|---|
| 09/667,954 | 09/22/2000 | David Russell Miller | 32973 | 2277 |

116 7590 06/25/2003

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| EXAMINER |
|---|
| SOTOMAYOR, JOHN |

| ART UNIT | PAPER NUMBER |
|---|---|
| 3714 | |

DATE MAILED: 06/25/2003

10

Please find below and/or attached an Office communication concerning this application or proceeding.

| Office Action Summary | Application No. | Applicant(s) |
|---|---|---|
| | 09/667,954 | MILLER, DAVID RUSSELL |
| | Examiner | Art Unit |
| | John L Sotomayor | 3714 |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on *05 May 2003* .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) *1-23,25-36 and 38-42* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *17 and 40* is/are allowed.

6)☒ Claim(s) *1-16,18-23,25-36,38,39,41 and 42* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *22 September 2000* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

## DETAILED ACTION

### *Continued Examination Under 37 CFR 1.114*

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on March 28, 2003 has been entered. Accordingly, claims 1-23, 25-36, and 38-42 are pending.

### *Claim Rejections - 35 USC § 102*

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

3. The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

4. Claims 1,3-16, 20-23, 34 and 35 are rejected under 35 U.S.C. 102(e) as being anticipated by Atkinson et al (US 6,507,726).

5. Regarding claim 1, Atkinson et al discloses a computer system for performing Internet based testing including a central processing site with a web server and a database with examination content (Col 3, lines 35-52 and Col 5, lines 55-57), a client computer with a web browser connected to the Internet for beginning a session and running an examination (Col 4, lines 1-9), a web server session management including a unique file allocated to a candidate in each examination session (Col 4, lines 45-48), and the web server automatically recording a current state of the examination and relaying this information, including a question, to the web server and receiving an answer back from a web server (Col 3, lines 13-18 and Col 5, lines 20-47).

6. Regarding claim 3, Atkinson et al discloses the process of state management from a client computer utilizing cookies (Col 4, lines 45-50).

7. Regarding claim 4, Atkinson et al discloses the process of state management from a client computer including a circuit for transmitting the updated state management messages to the web server, including the use of cookies (Col 4, lines 20-52).

8. Regarding claims 5 and 6, Atkinson et al discloses state management of examination information passed in a circuit between web client and web server, through the use of state management files including cookies (Col 5, lines 48-67 and Col 4, lines 45-50).

9. Regarding claims 7 and 8, Atkinson et al discloses state management of examination information passed in a circuit between web client and web server including receiving a request

and returning a response to the client computer through the use of state management files including cookies (Col 4, lines 38-52).

10. Regarding claim 9, Atkinson et al discloses administration of an examination over the Internet provided from a web server comprising logging in a candidate via the web browser, beginning an examination session, receiving and displaying examination content, automatically maintaining state of the candidate's examination session through a unique file (Col 4, lines 45-52), and the web server automatically recording a current state of the examination and relaying this information, including a question, to the web server and receiving an answer back from a web server (Col 3, lines 13-18 and Col 5, lines 20-47).

11. Regarding claim 10, Atkinson et al discloses that the unique communication file is stored on the web server (Col 4, lines 45-52).

12. Regarding claims 11-16, Atkinson et al discloses state management of examination information passed in a circuit between web client and web server including receiving a request, returning a response and updating state management files to the web server through the use of state management files including cookies (Col 4, lines 38-52).

13. Regarding claims 20-23, Atkinson et al discloses a programmed computer (claims 20-21) and a computer readable medium with stored computer executable software (claims 22-23) for a web server with a memory with at least one region for storing computer executable program code to inquire whether a candidate is allowed to access an examination content (Col 3, lines 35-52), to start an examination session, retrieve and display examination content via the web browser and provide the current state of the examination for each session (Col 4, lines 53-67) in which one method of enabling the state management file is a cookie (Col 4, lines 38-52), and in

which the web server automatically records a current state of the examination and relays this information, including a question, to the web server and receives an answer back from a web server (Col 3, lines 13-18 and Col 5, lines 20-47).

14. Regarding claim 34, Atkinson et al discloses that candidate log files may be managed, including creation and update, by the examination system (Col 4, lines 28-52).

15. Regarding claim 35, Atkinson et al discloses that a log file may be recovered for a particular examination session using the unique file associated with a specific examination action (Col 4, lines 37-52).

### *Claim Rejections - 35 USC § 103*

16. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

17. The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

18. Claims 2, 18-19, 25, 27, 29, 31, 33 and 39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Atkinson et al in view of Derzay et al (US 6,434,572).

19. Regarding claim 2, Atkinson et al discloses individual files stored on a web server (Col 4, lines 25-36), but does not specifically disclose that file security is implemented for the security of the exam. However, Derzay et al teaches that each test unit is stored in a separate file for each individual test taker for security of the exam (Col 10, lines 28-37). Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to produce a testing system that includes on-line testing in which files are stored on a web server and each test unit is stored in a separate file for each individual test taker for security of the exam for the purposes of ensuring data integrity and privacy for the users of the system.

20. Regarding claims 18-19, Atkinson et al discloses an education system in which the web server automatically recording a current state of the examination and relaying this information, including a question, to the web server and receiving an answer back from a web server (Col 3, lines 13-18 and Col 5, lines 20-47), and the process of state management from a client computer utilizing cookies (Col 4, lines 45-50). Atkinson et al does not specifically disclose that the information is entered on a server with implemented security systems. However, Derzay et al teaches a network-based testing system in which software code on a computer readable medium for a web server with secure access is implemented (Col 10, lines 11-22). Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to produce software code on a computer readable medium in which the web server automatically recording a current state of the examination and relaying this information, including a question, to the web server and receiving an answer back from a web server, the process of state management from a client computer utilizing cookies, and secure access to information on the web server is implemented for the purposes of providing data security and privacy for all testing system users.

21. Regarding claim 25, Atkinson et al discloses receiving an answer from a candidate on the web server and providing an assessment of the user based on the answer (Col 5, lines 48-67). Atkinson et al does not specifically disclose selecting a next examination content based on evaluation on the web server during examination session and assigning to the candidate new examination content. However, Derzay et al teaches a method selecting a next examination content based on evaluation on the web server during examination session and assigning to the candidate a new examination content (Col 11, lines 16-65 and Col 12). Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to produce a testing system in which the system receiving an answer from a candidate on the web server and providing an assessment of the user based on the answer, administering the web server, and selecting a next examination content based on evaluation on the web server during examination session and assigning to the candidate a new examination content for the purposes of real time feedback to the user of an on-line assessment or testing system.

22. Regarding claims 27 and 31, Atkinson et al discloses a full network interconnection between the central server, web server and client computer (Col 3, lines 52-67 and Col 4, lines 1-9). Atkinson et al does not specifically disclose that this network interconnection is through the use of a Virtual Private Network (VPN). However, Derzay et al teaches that a virtual private network is established between the central processing site and the client computer (Col 10, lines 8-10). Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to produce a testing system in which the network interconnectivity was established through a VPN for the purposes of superior data transfer and network stability.

23. Regarding claims 29 and 33, Atkinson et al does not specifically disclose that a next set of examination contents are transmitted to a candidate during an examination. However, Derzay et al teaches a system in which the web server dynamically evaluates examination activities as they occur and transmits next examination content to the candidate as required during the examination (Col 14, lines 13-19). Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to produce a testing system in which the web server dynamically evaluates examination activities as they occur and transmits next examination content to the candidate as required during the examination for the purposes of providing a seamless flow from one on-line testing activity to another for the user.

24. Regarding claim 39, Atkinson et al does not specifically disclose support for a plurality of languages. However, Derzay et al teaches that all examination activities, including session management, may be implemented in a plurality of languages based upon the country in which the system is to be implemented (Col 12, lines 35-40). Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to produce a testing system in which all examination activities, including session management, may be implemented in a plurality of languages based upon the country in which the system is to be implemented for the purposes of disseminating the system to a broader audience that may cross national boundaries.

25. Claims 28,32 and 41-42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Atkinson et al in view of Derzay et al in further view of Sonnenfeld (US 6,112,049).

26. Regarding claims 28 and 32, Atkinson et al does not specifically disclose that examination requests may be made in advance and that timing is considered important in bringing together the examination computer and user or that the examination activity is linked to

an identification code for specific time and place. However, Derzay et al teaches that examination requests may be made in advance and that timing is considered important in bringing together the examination computer and user (Col 13, lines 38-65). Derzay et al does not specifically disclose that the examination activity is linked to an identification code for specific time and place. However, Sonnenfeld teaches that an identification code is required to access a testing site (Col 51, lines 19-25) and it is common and well-known practice when scheduling any examination or testing activity that examiners or candidates will be required to log onto the examination system at a specific time and at a specific place in order to provide monitorable examination activity. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to produce a system with an identification code assigned to a candidate for monitorable examination activity to begin at a specified time and place. Combining the system disclosed by Atkinson et al with the teachings of Derzay et al and Sonnenfeld produces an examination test facility that is fully monitorable on a per test and per candidate basis.

27. Regarding claims 41 and 42, Atkinson et al does not specifically disclose a testing system with circuits that provide a viewable system clock for examination timing or a question flag or color within the view to indicate selection. Derzay et al discloses a method of implementing a Graphical User Interface (GUI) in use by the web server and web client to provide circuits for listing examination questions and content, displaying the content on multiple pages, and providing a system clock for examination timing (Col 13, lines 20-65 and Col 14, lines 1-32). Derzay et al does not specificially disclose a question flag or color on the view. However, Sonnenfeld teaches that an examination view screen may be designed in a plurality of manners for the comfort of the user, including modifying fields, links and buttons, including modifying

the appearance of a selected item within the view to indicate choice (Col 13, lines 35-65). Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to provide a GUI for the web server and web client to provide a circuit for listing examination questions and content, displaying the content on multiple pages, and providing an examination view screen may be designed in a plurality of manners for the comfort of the user, including modifying fields, links and buttons, including color as a design choice. Combining the system disclosed by Derzay et al with the teaching of Sonnenfeld produces a GUI with a view customizable for the examination process required by the users.

28. Claim 38 is rejected under 35 U.S.C. 103(a) as being unpatentable over Atkinson et al in view of Sonnenfeld.

29. Regarding claim 38, Atkinson et al does not specifically disclose a testing system in which a user is identified and allowed to enter an examination session. However, Sonnenfeld teaches the use of identification codes to log onto a system and be allowed to enter an examination session (Col 51, lines 19-29). Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to produce a system in which examination content is provided to a web browser and repeatedly recording the stat of the examination session and, using an identification code, be allowed to log onto a system and enter an examination session. . Combining the system disclosed by Atkinson et al with the teachings of Derzay et al and Sonnenfeld produces a system with secure examination access to discourage inappropriate access to the testing venue or data.

30. Claims 26, 30 and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Atkinson et al in view of Bowman-Amuah (US Patent 6,332,163).

31. Regarding claims 26 and 30, Atkinson et al does not specifically disclose that a digital certificate is provided to ensure secure access to the examination system. However, Bowman-Amuah teaches that a digital certificate is the primary method used in a testing system to provide secure SSL client authentication (Col 80, lines 44-54). Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to provide a system wherein the system provides a digital certificate to ensure secure access to the examination system. Combining the system disclosed by Derzay with the teaching of Bowman-Amuah produces a secure access to an examination system that may be used over an open network such as the Internet.

32. Regarding claim 36, Atkinson et al does not specifically disclose that communication between the web server and web browser is encrypted. However, Bowman-Amuah teaches that the need for encryption is strong when utilizing examination systems for monitoring over an open network such as the Internet (Col 81, lines 43-51). Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to provide a system with encrypted communication between the web browser and the web server. Combining the examination system disclosed by Derzay et al with the teaching of Bowman-Amuah provides a system better able to decrease the chances of information theft.

### *Allowable Subject Matter*

Claims 17 and 40 are allowed. The prior art does not teach or suggest a user activatable clock enabling the clock to be capable of displaying real time, examination elapsed time or examination time remaining in combination with the other limitations of the claims.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John L Sotomayor whose telephone number is 703-305-4558. The examiner can normally be reached on 6:30-4:00 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tom Hughes can be reached on 703-308-1806. The fax phone numbers for the organization where this application or proceeding is assigned are 703-746-8361 for regular communications and 703-746-8361 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-4558.

jls
June 20, 2003

Joe H. Cheng
Primary Examiner